

## CLAIMS

What is claimed is:

1. 1. Apparatus for the aggregation and display of information on a client device, said apparatus comprising:
  - 3 a communications module delivering information to and receiving information from a client device;
  - 5 an assimilation agent receiving information from at least one information source and encapsulating said information in a first wrapper using a platform-independent extendible markup language; and
  - 8 an integration server in communication with said communications module and said assimilation agent, said integration server receiving said encapsulated information from said assimilation agent, said integration server comprising a rules engine for processing said encapsulated information in accord with a predefined set of rules and encapsulating the result in a second wrapper using a platform-independent extendible markup language, and said integration server providing said encapsulated result to said communications module.
2. 2. The apparatus of claim 1 wherein said communications module delivers information to and receives information from said client device using one of hypertext markup language (HTML) and wireless markup language (WML).
- 1 3. 3. The apparatus of claim 1 wherein said communications module delivers information 2 customized according to a predefined profile.
- 1 4. 4. The apparatus of claim 1 wherein said communications module delivers information 2 customized according to the type of client device.
- 1 5. 5. The apparatus of claim 1 wherein said communications module, said integration server, 2 and said assimilation agent communicate using extensible markup language (XML).
- 1 6. 6. The apparatus of claim 1 wherein said assimilation agent retrieves information from one 2 of a SQL database, an Oracle database, a Domino database, a document repository, a SAP 3 database, a computer in communication with the Internet, and an indexed database.

1 7. The apparatus of claim 1 further comprising:  
2       a content delivery broker providing communications between said communications  
3 module and said integration server.

1 8. The apparatus of claim 7 wherein said communications provided by said content delivery  
2 broker utilize extensible markup language (XML).

1 9. The apparatus of claim 1 further comprising:  
2       a receiver agent in communication with said integration server and receiving messages  
3 sent in a protocol.

1 10. The apparatus of claim 9 wherein said protocol is one of file transfer protocol (FTP), post  
2 office protocol, version 3 (POP3), hypertext transfer protocol (HTTP), Microsoft Message Queue  
3 protocol (MSMQ), simple mail transfer protocol (SMTP), Directory Polling, and component-  
4 object model messages (COM).

1 11. The apparatus of claim 1 further comprising:  
2       a spider agent in communication with said integration server and initiating  
3 communications with a data source using a protocol.

1 12. The apparatus of claim 11 wherein said protocol is one of FTP, POP3, HTTP, MSMQ,  
2 SMTP, Directory Polling, and COM.

1 13. The apparatus of claim 1 further comprising:  
2       a sender agent in communication with said integration server and sending messages using  
3 a protocol.

1 14. The apparatus of claim 14 wherein said protocol is one of FTP, POP3, HTTP, MSMQ,  
2 SMTP, Directory Polling, and COM.

1 15. A method for aggregating information from multiple sources for presentation to a user,  
2 said method comprising the steps:

3 (a) receiving, by an assimilation agent, information from at least one of a plurality of  
4 information sources;

5 (b) encapsulating, by the assimilation agent, said received information in a first wrapper  
6 using a platform-independent extensible markup language;

7 (c) transmitting, by the assimilation agent, said encapsulated information to an integration  
8 server;

9 (d) processing, by the integration server, said encapsulated information in accord with a  
10 predefined set of rules;

11 (e) encapsulating, by the integration server, the processed information in a second  
12 wrapper using a platform-independent extensible markup language;

13 (f) transmitting, by the integration server, the processed information to a communications  
14 module; and

15 (g) delivering, by the communications module, said processed information to a client  
16 device.

1 16. The method of claim 15 wherein step (g) comprises the steps:

2 (g-a) identifying at least one of the type of client device or the type of said processed  
3 information.

1 17. The method of claim 16 wherein step (g) further comprises the steps:

2 (g-b) selecting an XML style sheet based on the result of step (g-a); and

3 (g-c) completing said XML style sheet with said processed information.

1 18. The method of claim 17 wherein step (g) further comprises the step:

2 (g-d) transforming the result of step (g-c) to a form suitable for display on said client  
3 device; and

4 (g-e) providing the result of step (g-d) to said client device.

1       19. An article of manufacture having computer-readable program means embodied therein for  
2 aggregating information from multiple sources for presentation to a user, said article comprising:  
3            computer-readable program means for receiving, by an assimilation agent, information  
4 from at least one of a plurality of information sources;

5            computer-readable program means for encapsulating, by the assimilation agent, said  
6 received information in a first wrapper using a platform-independent extensible markup  
7 language;

8            computer-readable program means for transmitting, by the assimilation agent, said  
9 encapsulated information to an integration server;

10          computer-readable program means for processing, by the integration server, said  
11 encapsulated information in accord with a predefined set of rules;

12          computer-readable program means for encapsulating, by the integration server, the  
13 processed information in a second wrapper using a platform-independent extensible markup  
14 language;

15          computer-readable program means for transmitting, by the integration server, the  
16 processed information to a communications module; and

17          computer-readable program means for delivering, by the communications module, said  
18 processed information to a client device.

1       20. The article of manufacture of claim 19 wherein said computer-readable program means  
2 for delivering, by the communications module, said processed information to a client device  
3 comprises:

4            computer-readable program means for identifying at least one of the type of client device  
5 or the type of said processed information.

1 21. The article of manufacture of claim 20 wherein said computer-readable program means  
2 for delivering, by the communications module, said processed information to a client device  
3 further comprises:

4 computer-readable program means for selecting an XML style sheet based on said at least  
5 one of the type of client device and the type of said processed information; and

6 computer-readable program means for completing said XML style sheet with said  
7 processed information.

1 22. The article of manufacture of claim 21 wherein said computer-readable program means  
2 for delivering, by the communications module, said processed information to a client device  
3 further comprises:

4 computer-readable program means for transforming said completed XML style sheet to a  
5 form suitable for display on said client device; and

6 computer-readable program means for providing said transformed style sheet suitable for  
7 display on said client device to said client device.